# MI BPM Installation and Commissioning

Stephen Wolbers May 16, 2006

#### Strategy

- Identify what is needed to install and commission the MI BPM system.
- Identify effort and skills needed for each of these jobs.
- Identify people who are available during the installation and commissioning period that have or can learn the skills.
- · Write a draft schedule.
- · Iterate.
- Do the work.

## Identify work required

- · Some things are obvious, e.g.
  - Install equipment.
  - Cable it.
  - Power it up.
- Other steps require a bit more thought to plan and expertise to implement.
- We need coordination, to allow us to install and commission with the greatest efficiency and least disruption to accelerator operations.
- The work will be distributed amongst many people, taking advantage of the expertise of those working on the project.

#### Schedule

- Would like to have all hardware and software ready when the shutdown ends.
  - Or at least enough to get started on the first building.
- Installation and commissioning will proceed as MI department gives the go-ahead.

### First draft of commissioning plan

- Worked out with Bob Webber last Friday.
  - Needs more input and refining.
  - Used experience with TeV BPM, MI BPM MI40, other systems, to put this together.

#### Installation and Commissioning Plan

- 1. Install and cable a house or a building: Marv, John, Bill
- 2. FE and online software changes to switch to new system: Luciano, Steve, Brian
- 3. Enable and test Closed-orbit mode
  - 1. FTP
  - 2. 3-bumps
  - 3. Display frame
  - 4. Profile buffers

#### Installation and Commisioning (2)

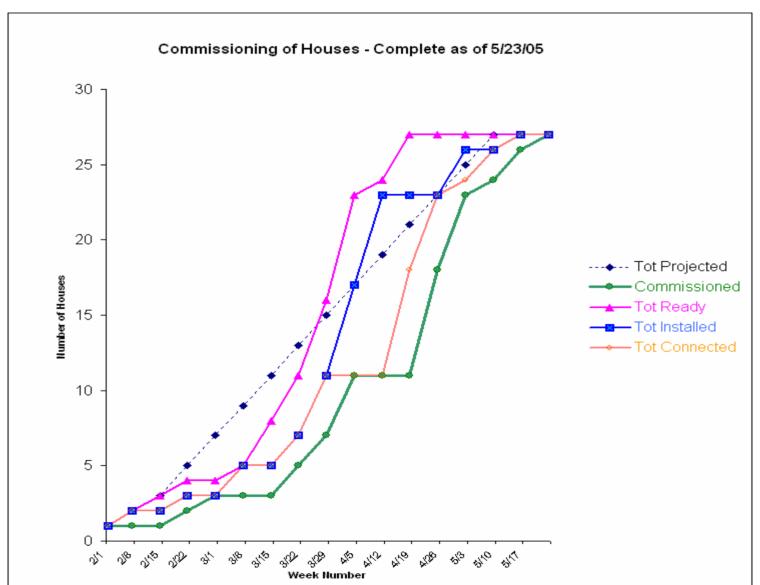
#### 4. Enable and Test TBT modes

- 1. Injection from different accelerators
- 2. Relative timing
  - 1. Building to building
  - 2. BPM to BPM
  - 3. Proton
  - 4. Pbar
- 3. Triggered TBT
- 4. FLASH, EXTRACTION

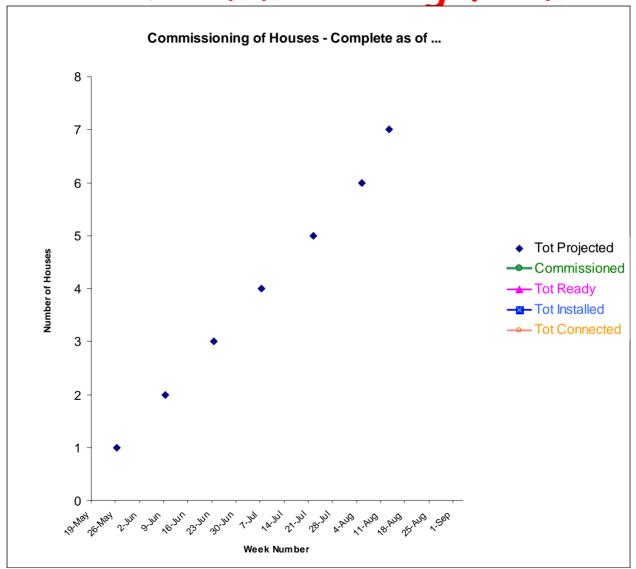
#### Installation and Commissioning (3)

- 5. Buffers and cycles
  - 1. Check that the data is being saved/used properly
- 6. Diagnostics
- 7. Other?
- 8. Coordination of all of the above
  - 1. Discussions to identify someone to coordinate the activity.

#### TeV BPM Schedule Actual and "planned"



# First Draft of MI BPM installation/commissioning from Bakul



#### Summary

- We want to install and commission a successful MI BPM upgrade.
- To do so requires some planning and coordination. We don't want to make a mess of it and we don't want to install a system that is difficult to use and understand.
- · With everyone's help we'll do a nice job.